

**Notice of Allowability**

Application No.

10/015,266

Examiner

Quynh H. Nguyen

Applicant(s)

BROWN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Supplemental Appeal Brief filed 8/27/05.
2. ☒ The allowed claim(s) is/are 1-5, 7-11, 14-18, 20-26, and 28-45 renumbered as claims 1-40.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
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### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Ms. Amy J. Pattillo on 12/5/05.

3. Claims 1, 14, 25, and 32 have been amended, claims 12-13 have been cancelled, and claims 37-45 have been added as follows:

1.(Currently Amended) A method for estimating wait times within a hold queue comprising:

receiving a plurality of calls at a call center, wherein each caller associated with a call from among said plurality of calls is identified by an authenticated caller identifier;

retrieving, for each caller according to said authenticated caller identifier, a caller profile from among a plurality of caller profiles, wherein each of said plurality of caller profiles indicates a previous call center usage history for each said caller;

estimating a plurality of call times individually for each of said plurality of calls within a call center based on said previous call center usage history for each said caller;

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positioning a particular call received from a particular caller at said call center within a hold queue; and

estimating a wait time in said hold queue for said particular call according to said plurality of call times individually estimated for said plurality of calls within said call center[.]; and

adjusting a selection of an output interface to which said wait time is output based on an amount of time remaining in said wait times wherein at a first amount of time remaining in said wait time said wait time is output to a first output interface and at a second amount of time remaining in said wait time said wait time is output to a second output interface.

12. (Cancelled).

13. (Cancelled).

14. (Currently Amended) A system for estimating wait times within a hold queue, comprising:

a call center for receiving a plurality of calls;

means for receiving a plurality of calls at a call center, wherein each caller associated with a call from among said plurality of calls is identified by an authenticated caller identifier;

means for retrieving, for each caller according to said authenticated caller identifier, a caller profile from among a plurality of caller profiles, wherein each of said plurality of caller profiles indicates a previous call center usage history for each said caller;

means for estimating a plurality of call times individually for each of said plurality of calls within a call center based on said previous call center usage history for each said caller;

means for positioning a particular call received from a particular caller at said call center within a hold queue; and

means for estimating a wait time in said hold queue for said particular call according to said plurality of call times individually estimated for said plurality of calls within said call center[.]; and

means for adjusting a selection of an output interface to which said wait time is output based on an amount of time remaining in said wait time, wherein at a first amount of time remaining in said wait time said wait time is output to a first output interface and at a second amount of time remaining in said wait time said wait time is output to a second output interface.

25. (Currently Amended) A computer program product for estimating wait times within a hold queue, said computer program product comprising:

a recording medium;

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means, recorded on said recording medium, for receiving a plurality of calls at a call center, wherein each caller associated with a call from among said plurality of calls is identified by an authenticated caller identifier;

means, recorded on said recording medium, for retrieving, for each caller according to said authenticated caller identifier, a caller profile from among a plurality of caller profiles, wherein each of said plurality of caller profiles indicates a previous call center usage history for each said caller;

means, recorded on said recording medium, for estimating a plurality of call times individually for each of said plurality of calls based on said previous call center usage history for each said caller;

means, recorded on said recording medium, for positioning a particular call received from a particular caller at said call center within a hold queue; and

means recorded on said recording medium, for estimating a wait time in said hold queue for said particular call according to said plurality of call times individually estimated for said plurality of calls within said call center[.]; and

means recorded on said recording medium, adjusting a selection of an output interface to which said wait time is output based on an amount of time remaining in said wait time, wherein at a first amount of time remaining in said wait time said wait time is output to a first output interface and at a second amount of time remaining in said wait time said wait time is output to a second output interface.

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32. (Currently Amended) A system for monitoring caller on hold characteristics, comprising:

a caller profile server communicatively connected to a plurality of call centers;

said caller profile server [service] further comprising:

means for receiving monitored on hold characteristics according to an authenticated caller identifier of a caller from at least one call center at which said caller has waited in a hold queue from among said plurality of call centers;

means for computing on hold statistics for said caller across at least one from among said plurality of call centers from said monitored on hold characteristics in said caller profile maintained in association with said authenticated caller identifier; and

means, responsive to receiving a request for said authenticated caller profile according to said caller identifier, for distributing said computed on hold statistics for said caller.

37. (Newly Added) The method according to claim 31 for monitoring on hold characteristics, wherein said authenticated caller identifier comprises an identifier for a device which compares a current voice sample provided by said caller with a previously stored voice sample for said caller to authenticate an identity of said caller.

38. (Newly Added) The method according to claim 31 for monitoring on hold

characteristics, wherein said on hold statistics specify on hold activity statistics of a caller accumulated from participation in on hold activities comprising at least one from among idleness, participation in surveys, participation in competitions, listening to music, and accessing a third party service.

39. (Newly Added) The method according to claim 31 for monitoring on hold characteristics, further comprising:

receiving said request for said caller profile according to said authenticated caller identifier at said caller profile server via a media gateway, wherein said caller profile server is accessible within an internet based network that interfaces with said plurality of call centers which are accessible within a telephony network through said media gateway, wherein said media gateway supports a plurality of protocols for communication between said internet based network and said telephony network.

40. (Newly Added) The system according to claim 32 for monitoring on hold characteristics, wherein said authenticated caller identifier comprises an identifier for a device through which compares a current voice sample provided by said caller with a previously stored voice sample for said caller to authenticate an identity of said caller.

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41. (Newly Added) The system according to claim 32 for monitoring on hold characteristics, wherein said on hold statistics specify on hold activity statistics of a caller accumulated from participation in on hold activities comprising at least one from among idleness, participation in surveys, participation in competitions, listening to music, and accessing a third party service.

42. (Newly Added) The system according to claim 32 for monitoring on hold characteristics further comprising:

a media gateway through which said caller profile server is communicatively connected to said plurality of call centers, wherein said caller profile server is accessible within an internet based network that interfaces with said plurality of call centers which are accessible within a telephony network through said media gateway, wherein said media gateway supports a plurality of protocols for communication between said internet based network and said telephony network.

43. (Newly Added) The computer program product according to claim 33 for monitoring on hold characteristics, further comprising:

means, recorded on said recording medium, for enabling receipt of monitored on hold characteristics according to an authenticated caller identifier of a caller from at least one call center at which said caller has waited in a hold queue, wherein said



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authenticated caller identifier comprises an identifier for a device which compares a current voice sample provided by said caller with a previously stored voice sample for said caller to authenticate an identity of said caller.

44. (Newly Added) The computer program product according to claim 33 for monitoring on hold characteristics, wherein said means, recorded on said recording medium, for computing on hold statistics for said caller across said at least one call center from said monitored on hold characteristics in said caller profile maintained in association with said authenticated caller identifier, further comprises:

means, recorded on said recording medium, for computing said on hold statistics which specify on hold activity statistics of a caller accumulated from participation in on hold activities comprising at least one from among idleness, participation in surveys, participation in competitions, listening to music, and accessing a third party service.

45. (Newly Added) The computer program product according to claim 33 for monitoring on hold characteristics, further comprising:

means, recording on said recording medium, for enabling receipt of said request for said caller profile according to said authenticated caller identifier at said caller profile server via a media gateway, wherein said caller profile server is accessible within an

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internet based network that interfaces with said plurality of call centers which are accessible within a telephony network through said media gateway, wherein said media gateway supports a plurality of protocols for communication between said internet based network and said telephony network.